

Level: bachelor				
Course title: Operator Theory (M4-30)				
Status: elective				
ECTS: 5				
Requirements: none				
Learning objectives Connecting the algebraic and topological structures of functional analysis with the operator theory and spectral analysis of operators and Banach algebras.				
Learning outcomes Understanding the basic assertions of operator theory and the spectral analysis of various classes of operators.				
Syllabus <i>Theoretical instruction</i> Banach and Hilbert spaces, Bounded linear operators, Fredholm theory, Self/adjoined operators, Spectral decomposition, Banach algebras, Unbounded operators and spectral decomposition, Concrete operators-spectral analysis. <i>Practical instruction</i> Exercises, students' seminar papers.				
Weekly teaching load				Other: 0
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Student research: 0	